

# Agenda and General Information

IEEE 802.3

Greater than 10 Gb/s Automotive Ethernet Electrical PHYs  
Study Group

Steve Carlson, Chair

High Speed Design, Inc., Robert Bosch, Marvell

Vienna, Austria

July 18, 2019

# Agenda

---

- Welcome and Introductions
- Approve Agenda
- Approve minutes from May
- Goals for this meeting
- Big Ticket Items
- Reflector and Web
- Ground Rules
- IEEE
  - Structure, Bylaws and Rules
  - Call for Patents
  - IEEE Standards Process
- Liaisons and Communications
- Presentations
- Motions and Closing Business
- Future Meetings

# Study Group Decorum



- An officer is permitted to make an audio or slideshow recording of this meeting exclusively for the purpose of generating minutes which shall not be copied or distributed. **IEEE 802.3 meetings do not use this option.** Recording of the proceedings by any other participant or observer, in part or in whole, via any means, is prohibited. (December 2018 IEEE-SA Standards Board Ops Manual 5.3.3.2)
- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (December 2018 IEEE-SA Standards Board Ops Manual 5.3.3.3)
- Cell phone ringers off
- Wear your badges at all times in meeting areas
  - Help the hotel security staff improve the general security of the meeting rooms
  - **PCs HAVE BEEN STOLEN** at previous meetings
  - **DO NOT** assume that meeting areas are secure
- Please observe proper decorum in meetings

# Goals for the meeting

---

- Review of purpose and operation of an IEEE 802.3 Study Group
- Presentations on Project Authorization Request, Criteria for Standards Development, Objectives
- Link Segment
  
- Lay the ground work for the next meeting

# Big ticket items

---

- Lay the ground work for the next meeting

# Reflector and Web

---

- To subscribe to the reflector, **Greater than 10 Gb/s Automotive Ethernet Electrical PHYs Study Group**, send an email to:

[ListServ@ieee.org](mailto:ListServ@ieee.org)

with the following in the body of the message (do not include “<>”):

*subscribe* stds-802-3-B10GAUTO<*yourfirstname*> <*yourlastname*>  
*end*

- Send **Greater than 10 Gb/s Automotive Ethernet Electrical PHYs Study Group** reflector messages to:

[stds-802-3-B10GAUTO@listserv.ieee.org](mailto:stds-802-3-B10GAUTO@listserv.ieee.org)

- Study Group web page URL:

<http://ieee802.org/3/B10GAUTO/index.html>

# Study Group Private Area

---

- We currently have NO Study Group private area.
- Should we have one, the username and password will be shown at the face-to-face meetings only, and not be in the posted slides.
- If we receive copyrighted material, for example, specs from another SDO, we would establish a study group private area.
- Note - The content is posted for your review only, and neither the content nor access information should be copied or redistributed to others in violation of document copyrights.

# Presentation Filenames

---

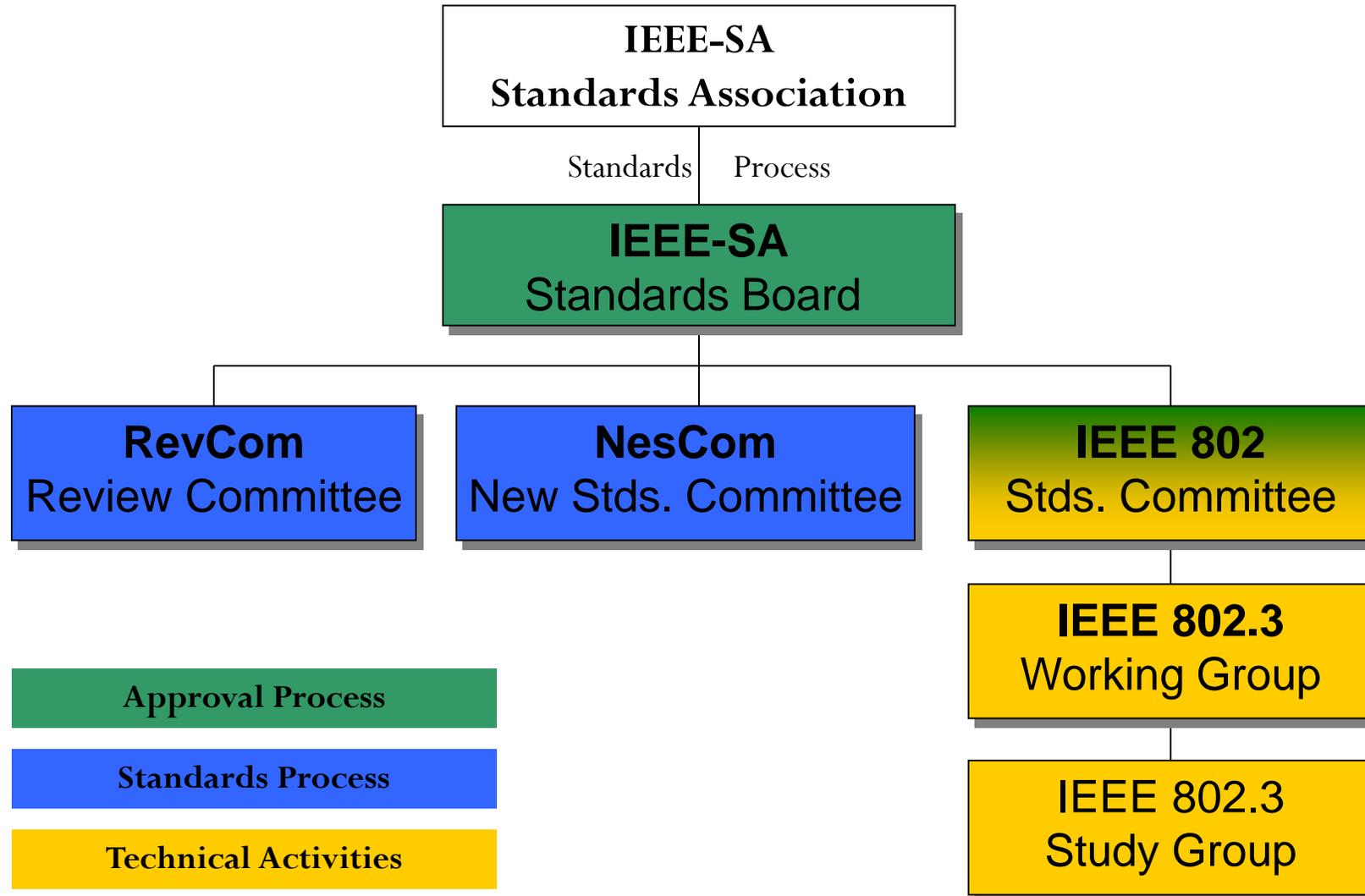
- Please use the following filename convention:  
*presenter\_last\_name\_B10GAUTO\_presentation\_number\_revision\_level\_date\_code*
- Example of a filename: *presenter\_last\_name*: Smith; *B10GAUTO*; *presentation\_number* is the number of the presentation, e.g. 01 for your first presentation, 02 for the second, etc.; *revision\_level* is appended if the presentation is updated, e.g. 01a, 01b, etc.; *date\_code* is the number of the month followed by the year, e.g. 0519 for May 2019. The resulting filename would be ***smith\_B10GAUTO\_01\_0519***.

# Ground Rules

---

- Based upon IEEE 802.3 Rules
  - Foundation based upon Robert's Rules of Order
  - Anyone in the room may speak
  - Anyone in the room may vote
- **RESPECT**... give it, get it
- NO product pitches
- NO corporate pitches
- NO prices!!!
  - This includes costs, ASPs, etc. no matter what the currency
- NO restrictive notices

# IEEE Structure



# Important Bylaws and Rules

---

- **IEEE-SA Operations Manual**  
[http://standards.ieee.org/develop/policies/sa\\_opman/](http://standards.ieee.org/develop/policies/sa_opman/)
- **IEEE-SA Standards Board Bylaws**  
<http://standards.ieee.org/develop/policies/bylaws/>
- **IEEE-SA Standards Board Operations Manual**  
<http://standards.ieee.org/develop/policies/opman/>
- **IEEE 802 LAN/MAN Standards Committee (LMSC) Policies and Procedures**  
<https://ieee.app.box.com/v/PandP-LMSC>
- **IEEE 802 LAN/MAN Standards Committee (LMSC) Operations Manual**  
<http://www.ieee802.org/devdocs.shtml>
- **IEEE 802 LAN/MAN Standards Committee (LMSC) Working Group (WG) Policies and Procedures**  
<http://www.ieee802.org/devdocs.shtml>
- **IEEE 802.3 Working Group Operating Rules**  
[http://ieee802.org/3/rules/P802\\_3\\_rules.pdf](http://ieee802.org/3/rules/P802_3_rules.pdf)

# Guidelines for IEEE-SA Meetings

- ▣ All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.
- ▣ Don't discuss the interpretation, validity, or essentiality of patents/patent claims.
- ▣ Don't discuss specific license rates, terms, or conditions.
  - ▣ Relative costs, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.
    - ▣ Technical considerations remain primary focus
- ▣ Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.
- ▣ Don't discuss the status or substance of ongoing or threatened litigation.
- ▣ Don't be silent if inappropriate topics are discussed... do formally object.

-----  
If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at [patcom@ieee.org](mailto:patcom@ieee.org) or visit <http://standards.ieee.org/about/sasb/patcom/index.html>

See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and “Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association’s Antitrust and Competition Policy” for more details.

This slide set is available  
at <https://development.standards.ieee.org/myproject/Public/mytools/mob/preparslides.ppt>

# Participation in IEEE 802 Meetings

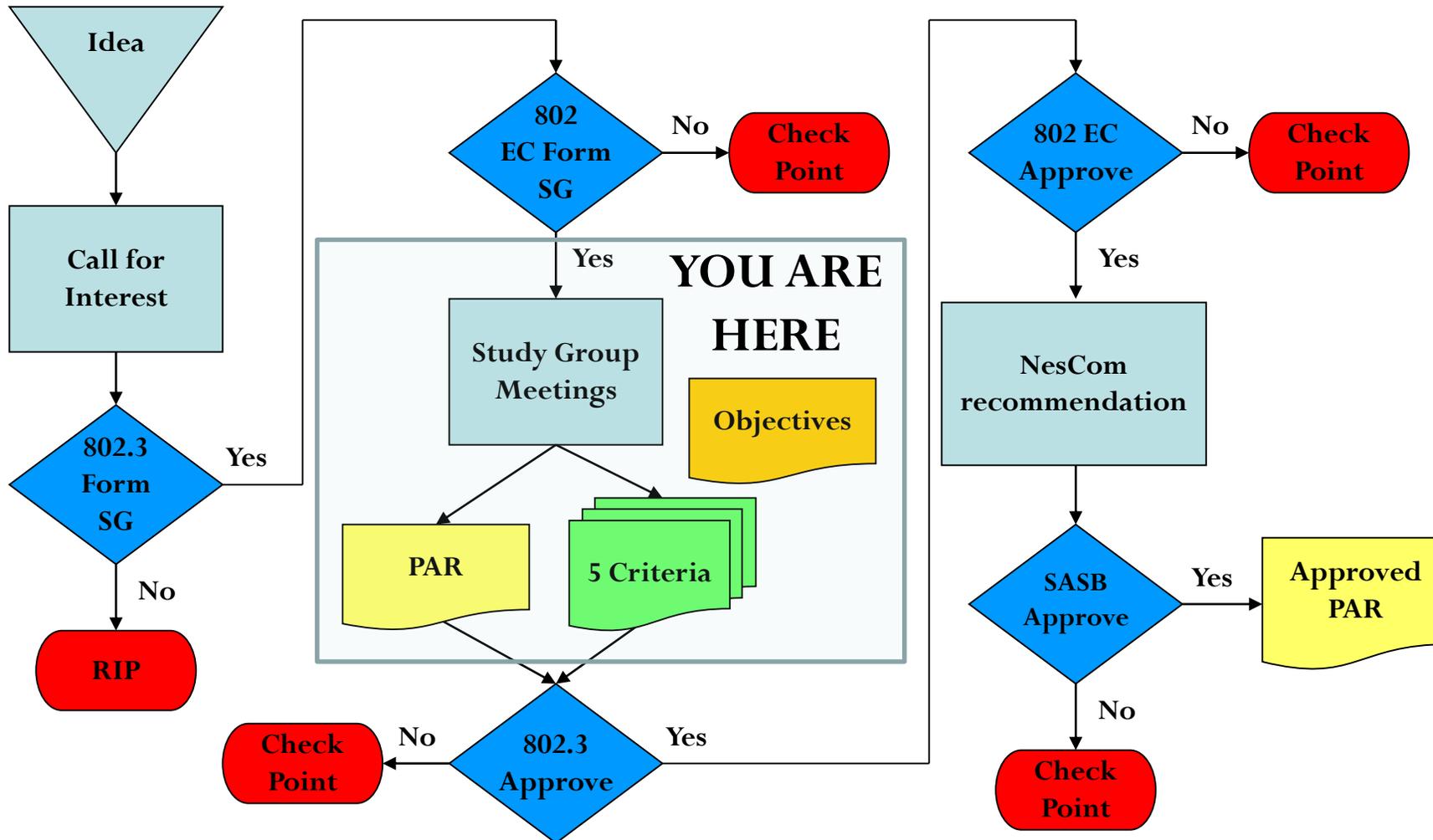
**Participation in any IEEE 802 meeting (Sponsor, Sponsor subgroup, Working Group, Working Group subgroup, etc.) is on an individual basis**

- **Participants in the IEEE standards development individual process shall act based on their qualifications and experience. ([https://standards.ieee.org/develop/policies/bylaws/sb\\_bylaws.pdf](https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf) section 5.2.1)**
- **IEEE 802 Working Group membership is by individual; “Working Group members shall participate in the consensus process in a manner consistent with their professional expert opinion as individuals, and not as organizational representatives”. (subclause 4.2.1 “Establishment”, of the IEEE 802 LMSC Working Group Policies and Procedures)**
- **Participants have an obligation to act and vote as an individual and not under the direction of any other individual or group. A Participant’s obligation to act and vote as an individual applies in all cases, regardless of any external commitments, agreements, contracts, or orders.**
- **Participants shall not direct the actions or votes of any other member of an IEEE 802 Working Group or retaliate against any other member for their actions or votes within IEEE 802 Working Group meetings, see [https://standards.ieee.org/develop/policies/bylaws/sb\\_bylaws.pdf](https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf) section 5.2.1.3 and the IEEE 802 LMSC Working Group Policies and Procedures, subclause 3.4.1 “Chair”, list item x.**

**By participating in IEEE 802 meetings, you accept these requirements. If you do not agree to these policies then you shall not participate.**

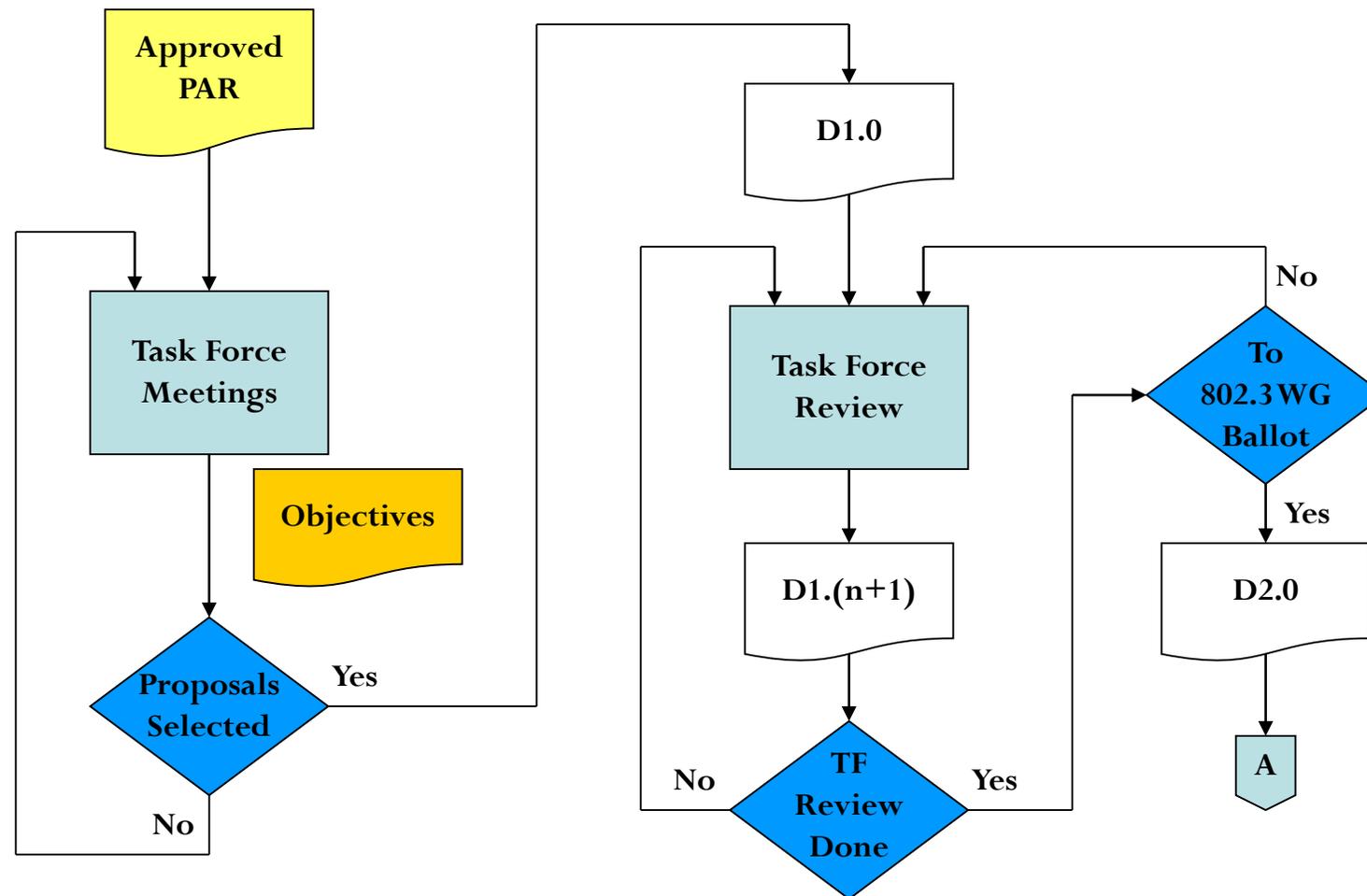
(Latest revision of IEEE 802 LMSC Working Group Policies and Procedures: <http://www.ieee802.org/devdocs.shtml>)

# Overview of IEEE 802.3 Standards Process (1/5)- Study Group Phase

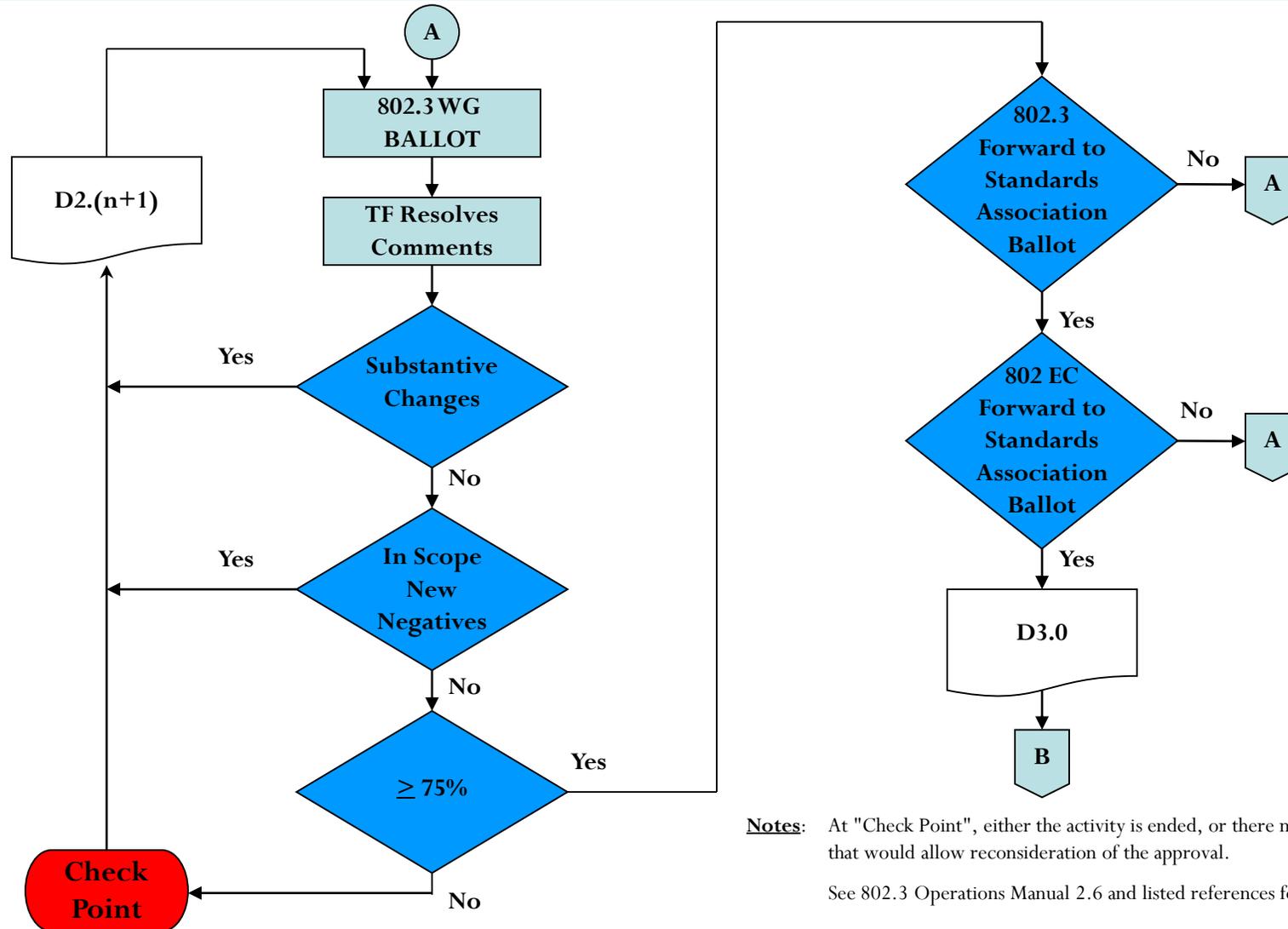


Note: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

# Overview of IEEE 802.3 Standards Process (2/5) – Task Force Comment Phase



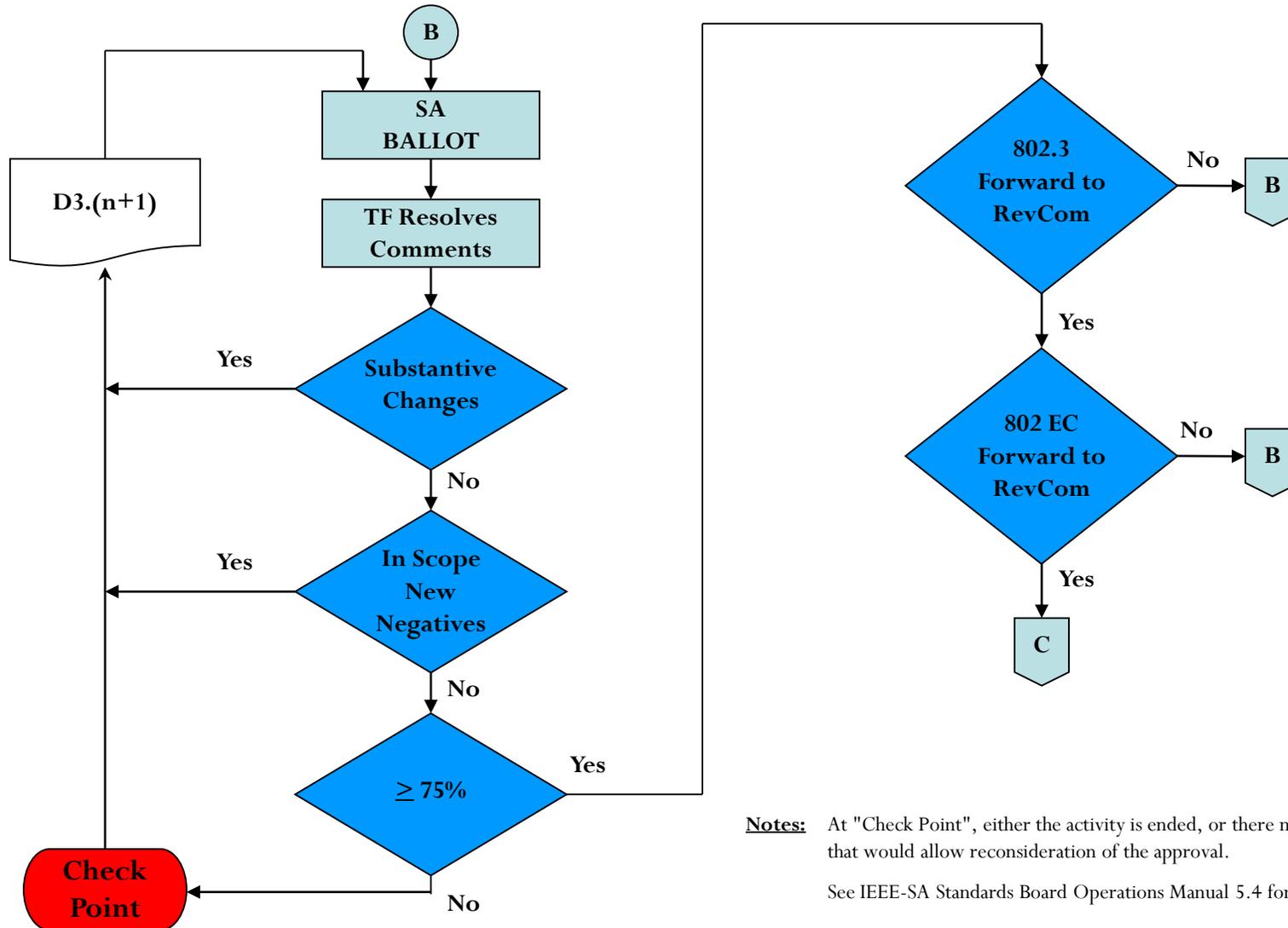
# Overview of IEEE 802.3 Standards Process (3/5) – Working Group Ballot Phase



**Notes:** At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

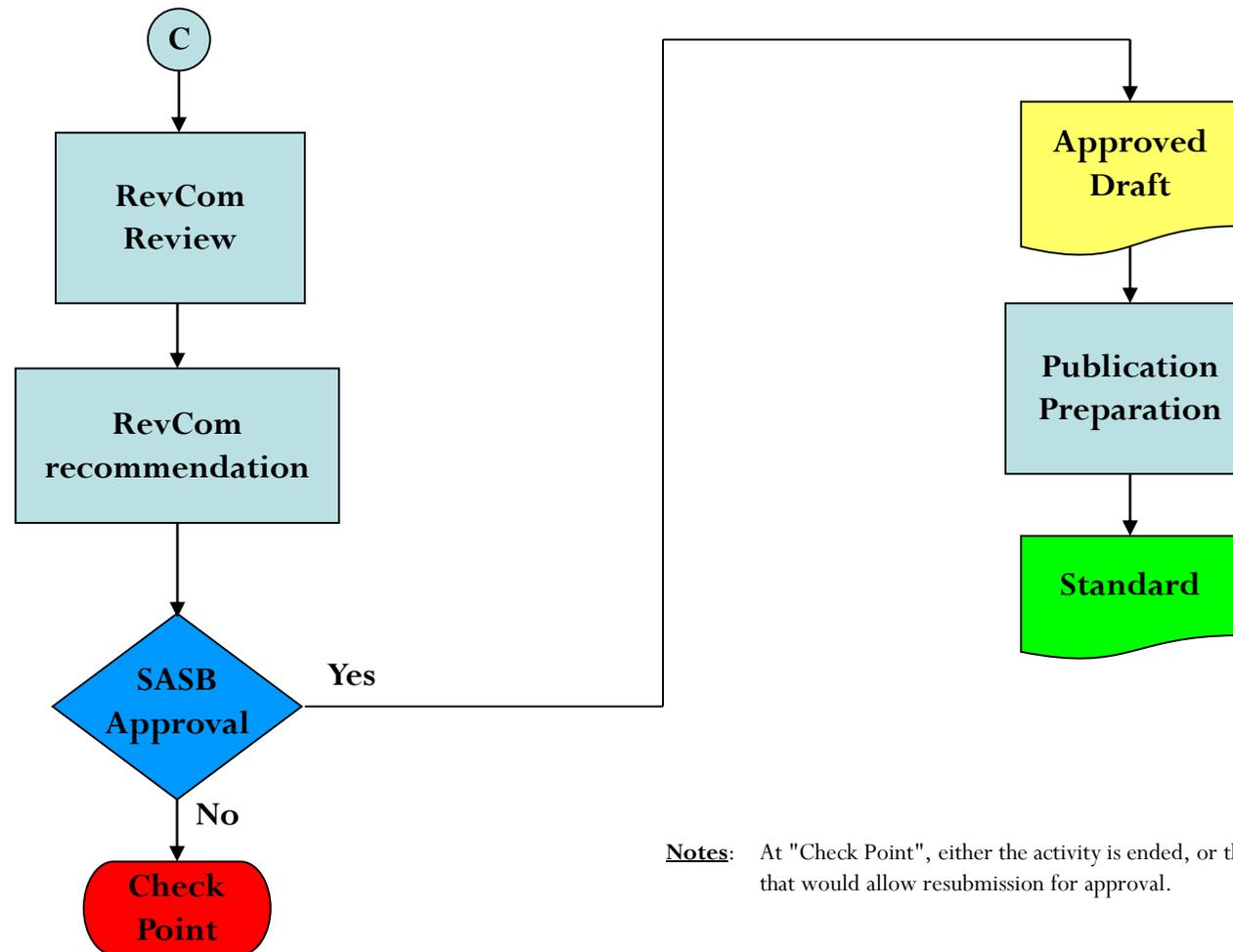
See 802.3 Operations Manual 2.6 and listed references for complete description

# Overview of IEEE 802.3 Standards Process (4/5)- IEEE Standards Association (SA) Ballot Phase



**Notes:** At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.  
See IEEE-SA Standards Board Operations Manual 5.4 for complete description

# Overview of IEEE 802.3 Standards Process (5/5) – Final Approvals / Standard Release



**Notes:** At "Check Point", either the activity is ended, or there may be various options that would allow resubmission for approval.

# The Study Group

---

- Normal function is to draft a complete PAR and Five Criteria
- Provide a plenary week tutorial to the LMSC.
- Gain approval at the IEEE 802.3 WG, IEEE 802 EC, IEEE-SA NesCom and IEEE-SA Standards Board.
- SG only exists for 6 months
  - Extensions can be requested
  - Voted on by IEEE 802.3
  - Ratified by IEEE 802 EC
- Development of Objectives helps set the goals for the Task Force
- Consensus required to move forward
  
- Not a goal – choosing a solution.

# Request for Formation of Study Group (as per Motion #17 March 2019 Plenary)

---

- Move that the IEEE 802.3 Working Group request the formation of a Study Group to develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for **Greater than 10 Gb/s Automotive Ethernet Electrical PHYs**
- M: Steve Carlson S: Chris Mash
- (>50%)
- Y: 87 N: 0 A: 2

# Request for Formation of Study Group (as per Motion #17 March 2019 Plenary)

---

- The motion sets the scope of the Study Group

# Liaisons and Communications

---

- None at this time

# Action Items

---

# Attendance

---

- Tutorial Material on attendance tool
  - [http://ieee802.org/3/minutes/attendance\\_procedures.pdf](http://ieee802.org/3/minutes/attendance_procedures.pdf)
- Access details
  - URL: <http://imat.ieee.org/>
  - (For interim)

# Presentations – IEEE Process

---

Draft PAR	Steve Carlson	High Speed Design, Inc., Robert Bosch GmbH, Marvell
Draft CSD	Steve Carlson	High Speed Design, Inc., Robert Bosch GmbH, Marvell
Draft Objectives	Steve Carlson	High Speed Design, Inc., Robert Bosch GmbH, Marvell

Note –Times listed are subject to change.

# Industry Needs

---

**Network Topology Analysis**

**Chris Mash**

**Marvell**

Note –Times listed are subject to change.

# Feasibility

---

<u>Greater than 10 Gb/s Automotive Ethernet Link Segment</u>	Chris DiMinico	MC Communications/Panduit
<u>Two Types of STP Automotive Cable Support 10G+</u>	Evan Sun	Huawei

Note –Times listed are subject to change.

# Motions and Straw Polls

---

Move that the IEEE 802.3 Working Group request the re-chartering of the IEEE 802.3 Greater than 10 Gb/s Automotive Ethernet Electrical PHYs Study Group.

M:     S:

Procedural >50%

Note –Times listed are subject to change.

# Future Meetings

---

- See: <http://www.ieee802.org/3/interims/index.html>
- September 2019 Interim
  - September 9-13, Indianapolis, IN, USA
  - Westin Indianapolis Hotel
- November 2019 Plenary
  - November 10-15
  - Hilton Waikoloa Village, Kona, HI, USA
- Anyone interested in hosting a interim meeting contact me or the IEEE 802.3 Executive Secretary [Steve Carlson](#).

# Future Meetings

---

Attendance:

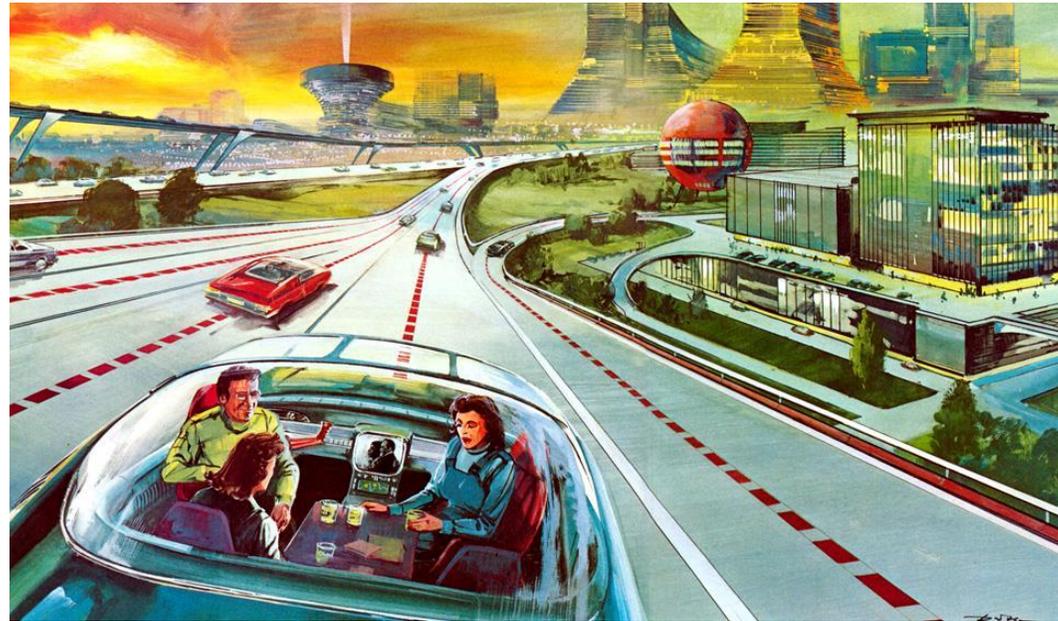
Attend Sept 2019 interim, Indianapolis, IN, USA:

Y:    N:    M:

Attend November 2019 802 Waikoloa plenary:

Y:    N:    M:

# Questions?



Thank you!